United States Environmental Protection Agency Region 5

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) FINDING OF VIOLATION
) EPA-5-01-IL-10)
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FINDING OF VIOLATION

The United States Environmental Protection Agency finds that Safety-Kleen Systems, Inc. (Safety-Kleen) is violating Section 112 of the Clean Air Act, 42 U.S.C. § 7412 (Act). Specifically, Safety-Kleen is violating the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Off-Site Waste and Recovery Operations (OSWRO) at 40 C.F.R. part 63, subpart DD. Safety-Kleen is also violating Title V of the Clean Air Act Amendments of 1990, 42 U.S.C. §§ 7661 et seq. The basis for these findings is discussed below.

Regulatory Authority

- 1. The NESHAP regulations for OSWRO, effective July 1, 1996, apply to the owner or operator of waste management or recovery operation that:
 - (a) is a major source of hazardous air pollutants (HAP) emissions as defined in 40 C.F.R. § 63.2;
 - (b) receives "off-site material" as defined in 40 C.F.R. §§ 63.680(b) and 63.681; and
- (c) is a waste management operation or recovery operation as specified in 40 C.F.R. §§ 63.680(a)(2) and 63.681. See 40 C.F.R. § 63.680.
- 2. The NESHAP at 40 C.F.R. § 63.680(b)(1) establishes control requirements for off-site material management units at a subject OSWRO facility. The NESHAP at 40 C.F.R. §§ 63.681 and 63.680(c)(1) define "off-site material management unit" and off-

site material management unit "affected source," respectively, for the purpose of determining applicability to 40 C.F.R. § 63.680(b). An off-site material management unit affected source must meet the requirements of either 40 C.F.R. §§ 63.683(b)(1)(i), (ii), or (iii). An owner or operator complying through 40 C.F.R. § 63.683(b)(1)(i) must control air emissions from each off-site material management unit in accordance with the applicable standards specified in 40 C.F.R. §§ 63.685 through 63.689.

- 3. The NESHAP at 40 C.F.R. § 63.689(c) establishes requirements for a "transfer system" of an off-site material management unit, as that term is defined under 40 C.F.R. § 63.681. Among the options for compliance specified under 40 C.F.R. § 63.689(c) is using a transfer system that is enclosed and vented through a closed-vent system to a control device as specified in 40 C.F.R. § 63.689(c)(3). Paragraph(c)(3)(ii) requires that the closed-vent system and control device are designed and operated in accordance with 40 C.F.R. § 63.693.
- 4. The NESHAP at 40 C.F.R. § 63.683(c)(1) establishes requirements for process vents at an OSWRO facility. The NESHAP at 40 C.F.R. §§ 63.681 and 63.680(c)(2) define "process vent" and process vent "affected source," respectively, for the purpose of determining applicability of 40 C.F.R. § 63.683(c)(1). A process vent affected source must meet either 40 C.F.R. §§ 63.683(c)(1) or (ii). An owner or operator complying through 40 C.F.R. § 63.683(c)(1)(i) must control air emission from each process vent in accordance with 40 C.F.R. § 63.690. The NESHAP at 40 C.F.R. § 63.690 provides that an owner or operator complying through 40 C.F.R. § 683(c)(1)(i) must route the vent stream from each affected process vent through a closed-vent system to a control device that meet the standards specified under 40 C.F.R. § 63.693.
- 5. The NESHAP at 40 C.F.R. § 63.683(c)(2)(ii) exempts a process vent from the requirements of 40 C.F.R. § 63.683(c)(1) if the owner or operator determines that the process vent stream flow rate is less than 0.005 cubic meters per minute (m3/min) at standard conditions (as defined in 40 C.F.R. § 63.2). The process vent stream flow rate shall be determined with the procedures specified in 40 C.F.R. § 63.694(m).

- 6. The NESHAP at 40 C.F.R. § 63.693(f)(2) requires owners or operators using vapor incinerators to comply with 40 C.F.R. § 63.693 to demonstrate that the control device achieves required performance requirements by either conducting a performance test or design analysis.
- 7. The NESHAP at 40 C.F.R. § 63.693(e)(2) requires owners or operators using condensers to comply with 40 C.F.R. § 63.693 to demonstrate that the control device achieves required performance requirements by either conducting a performance test or design analysis.
- 8. The NESHAP at 40 C.F.R. § 63.680(f) provide that certain provisions of 40 C.F.R. part 63, subpart A, apply to subject OSWRO facilities. Table 2 of 40 C.F.R. part 63, subpart DD specifies which subpart A requirements a OSWRO facility must meet. Among these applicable requirements is 40 C.F.R. § 63.6(f)(2)(iii)(B), which requires conducting performance tests to establish compliance with the NESHAP must be conducted under "representative operating conditions for the source."
- 9. The NESHAP at 40 C.F.R. § 63.695(e)(3) requires the owner or operator to establish a minimum and maximum operating parameter value for each monitored operating parameter to define the range of conditions at which the control device must be operated to continuously achieve applicable performance requirements.
- 10. The NESHAP at 40 C.F.R. § 63.680(e)(1)(i) specifies that the owner or operator of an affected source that commenced construction or reconstruction before October 13, 1994 and receives off-site material for the first time before February 1, 2000, must achieve compliance with the provisions of 40 C.F.R. part 63, subpart DD on or before February 1, 2000.
- 11. The NESHAP at 40 C.F.R. § 63.680(e)(2) specifies that the owner or operator of an affected source that commenced construction or reconstruction on or after October 13, 1994, must achieve compliance with the provisions of 40 C.F.R. part 63, subpart DD on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 C.F.R. § 63.6(b).
- 12. The NESHAP at 40 C.F.R. § 63.7(a)(2), as required by Table 2

- of 40 C.F.R. part 63, subpart DD, requires the owner or operator to conduct and submit results of any performance test required under 40 C.F.R. part 63, subpart DD within 180 days after the February 1, 2000 compliance date specified in 40 C.F.R. § 63.680(e)(1)(i).
- 13. The NESHAP regulation at 40 C.F.R. § 63.9(h), as required by 40 C.F.R. § 697(a)(1) and Table 2 of 40 C.F.R. part 63, subpart DD, provides for notification of compliance status requirements to the Administrator.
- 14. The Illinois Environmental Protection Agency (Illinois EPA) incorporated the requirements of 40 C.F.R. part 63, subpart DD into Safety-Kleen's March 24, 2000 Clean Air Act Permit Program (CAAPP) permit at Conditions 7.1.3, 7.3.3, and 7.6.3.
- 15. U.S. EPA gave the Illinois' CAAPP program interim approval as a 40 C.F.R. part 70 permit program on March 7, 1995. See 60 Fed. Reg. at 12478. U.S. EPA promulgated the part 70 program regulations under the authority of section 502 of the Act, 42 U.S.C. § 7661a. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA under the Act.

Safety-Kleen's Facility

- 16. Safety-Kleen owns and operates an OSWRO facility located at 633 East 138th Street, Dolton, Illinois.
- 17. The Safety-Kleen facility in Dolton, Illinois is a major source of hazardous air pollutant (HAP) emissions as defined in 40 C.F.R. § 63.2.
- 18. Safety-Kleen's facility is a waste management operation that receives "off-site material" as defined under 40 C.F.R. § 63.680(b).
- 19. U.S. EPA and Illinois EPA jointly issued Safety-Kleen's facility a part B permit to operate as a Resource Conservation and Recovery Act hazardous waste transportation, storage, and disposal facility. The facility therefore is a "waste management"

operation" and "recovery operation" as defined by 40 C.F.R. §§ 63.680(a)(2) and 63.681.

- 20. The drum shredder system (i.e., drum shredder, hydrapulper, and metal wash unit) at the Safety-Kleen facility is an "off-site material management unit" and is part of an off-site material management unit "affected source" within the meaning of 40 C.F.R. §§ 63.681 and 63.680(c)(1).
- 21. The drum shredder system is a "transfer system" within the meaning of 40 C.F.R. § 63.681.
- 22. The drum shredder system utilizes a thermal oxidizer (Control 22) "control device" for the drum shredder system within the meaning of 40 C.F.R. § 63.681.
- 23. The drum shredder system at the Safety-Kleen facility is a "new source" within the meaning of 40 C.F.R. § 63.680(e)(2). Safety-Kleen completed constructed the drum shredder system in July 1996 to replace a drum handling system (vats 1 and 2) and drum vent to process waste materials.
- 24. The thermal oxidizer was originally installed to control emissions from the drum handling system and drum vent. On March 25 through 27, 1996, Safety-Kleen conducted an emissions test to determine the destruction efficiency of the thermal oxidizer (Control 22) and capture efficiency of the process vents that duct to the thermal oxidizer as required for an operations permit. This stack test occurred prior to the construction of the drum shredder system.
- 25. Safety-Kleen has not tested the thermal oxidizer control device since the drum shredder system was constructed in 1996.
- 26. The LUWA #2 and LUWA #3 evaporators, and Safety-Therm #1 evaporator are "process vents" and part of a process vent "affected source" within the meaning of 40 C.F.R. §§ 63.681 and 63.680(c)(2).
- 27. The LUWA #2 and LUWA #3 evaporators, and Safety-Therm #1 evaporator at the Safety-Kleen facility are each an "existing source" within the meaning of 40 C.F.R. § 63.680(e)(1).

- 28. The chilled vent condensers (Controls 19A, 19B, and 21) are "control devices" for the LUWA #2 and LUWA #3 evaporators, and Safety-Therm #1 evaporator, within the meaning of 40 C.F.R. § 63.681.
- 29. Safety-Kleen conducted a flow rate compliance test on the process vent serving the LUWA #2 evaporator on December 21, 1999, and on the process vent serving the LUWA #3 evaporator on January 14, 2000 to meet the exemption requirements in 40 C.F.R. § 63.683(c)(2)(ii). However, the tests were not conducted under representative operating conditions, as required by 40 C.F.R. § 63.6(f)(2)(iii)(B). Safety-Kleen submitted the results of these tests to Illinois EPA on May 22, 2000.
- 30. The Safety-Kleen facility in Dolton, Illinois, is subject to the NESHAP and CAAPP requirements identified above.

Violations

- 31. Safety-Kleen failed to demonstrate that the thermal oxidizer (Control 22) destroys HAP emissions contained in the drum shredder vent stream entering the thermal oxidizer by 95 percent or more, in violation of Condition 7.1.7(d) of the CAAPP Permit and 40 C.F.R. § 63.693(f)(2). Safety-Kleen failed to conduct a performance test after the drum shredder unit was added in 1996. Consequently, Safety-Kleen has not conducted a performance test on the thermal oxidizer under representative operating conditions for the off-site material management unit affected source as required in 40 C.F.R. § 63.6(f)(2)(iii)(B), which is necessary for an acceptable demonstration of control device compliance.
- 32. Safety-Kleen failed to demonstrate that the chilled vent condensers (Controls 19A and 19B) destroy HAP emissions contained in the LUWA #2 and LUWA #3 evaporator vent streams (LUWA #2 and LUWA #3) entering the condensers by 95 percent or more, in violation of Condition 7.1.7(c) of the CAAPP Permit and 40 C.F.R. § 63.693(e)(2).
- 33. Safety-Kleen has not conducted a performance test, nor submitted a design analysis, for the chilled vent condenser (Control 21) controlling the Safety-Therm #1 evaporator, in violation of Condition 7.1.7(c) of the CAAPP Permit and 40 C.F.R. § 63.693(e)(2).

- 34. Safety-Kleen failed to establish the minimum or maximum operating temperature of the thermal oxidizer (Control 22) based on values measured during the performance test conducted on March 25 through 27, 1996, in violation of Condition 7.1.8(g) (iii) of the CAAPP Permit and 40 C.F.R. § 63.695(e)(3).
- 35. Safety-Kleen failed to submit a notification of compliance status within 60 calendar days after each compliance demonstration activity for the thin film evaporators (LUWAs #2 and #3), in violation of Condition 7.1.10(b)(i) of the CAAPP permit and 40 C.F.R. § 63.9(h).

Cheryl Newton, Acting Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Finding of Violation, No. EPA-5-01-IL-10, by Certified Mail, Return Receipt Requested, to:

Joseph T. Biggio, Facility Manager Safety-Kleen Systems, Inc. 1301 Gervais Street Suite 300 Columbia, South Carolina 29201

I also certify that I sent copies of the Finding of Violation by first class mail to:

Julie Armitage, Acting Manager Compliance and Enforcement Section Bureau of Air Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62702

Harish Narayen, Acting Regional Manager Region 1 Illinois Environmental Protection Agency 9511 West Harrison Street Des Plaines, Illinois 60016

Robert Burke, III, Environmental Compliance Manager Safety-Kleen Systems, Inc. 633 East 138th Street Dolton, Illinois 60419-1058

on the 8th day of May, 2001

Betty Williams, Secretary

AECAS, (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 10993400000093917645